

PLANS
FOR THE
DEFENCE
OF
GREAT BRITAIN
AND
IRELAND.

“What animates me greatly to make the attempt, is a firm
“conviction, that a military and an industrious spirit are of
“equal importance to Britain; and that, if either of them
“be lost, we are undone.” KAMES.

BY LIEUT. COLONEL DIROM,
DEPUTY QUARTER-MASTER-GENERAL IN NORTH BRITAIN.

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TO
FIELD MARSHALL
HIS ROYAL HIGHNESS
THE DUKE OF YORK,

COMMANDER IN CHIEF OF HIS MAJESTY'S FORCES,

&c. &c. &c.

SIR,

Impressed with a high sense of the benefit, which has arisen to the Army and the Nation, from the appointment of your Royal Highness to be Commander in Chief; and having myself experienced the approbation which you graciously bestow on those who exert themselves in the public service; I have, although conscious of being unequal to the task, been induced to write the following Treatise for

*your inspection ; in the hope it may not
be altogether undeserving of the notice of
your Royal Highness, and that it may be
somewhat useful at a time when the minds
of all men are turned to the defence of the
country.*

*I have the honour to be, with senti-
ments of the highest respect,*

SIR,



Your ROYAL HIGHNESS'S

Most devoted and

Most humble Servant,

EDINBURGH, }
May 13. 1797. }

ALEX. DIROM.

PREFACE.

THE *Invasion* which the French have attempted in Ireland, and with which they and their *tributary* allies threaten also England and Scotland, has given rise to many able suggestions for the defence of the united kingdoms. Ideas, which have thus arisen in the hour of danger, ought to be arranged and preserved for both the present and future use, especially as, by submitting them in this manner to the consideration of the public, the expediency of such measures may be farther canvassed, and improvements may more readily occur by reducing those desultory ideas into a regular system of defence.

It need only farther be premised, that it may be the policy of the French to endeavour, by empty threats of invasion, or even by the sacrifice of several armaments, to shake our public credit ; to oblige us to exhaust our resources in preparations for defence ; and to bring upon us the miseries of famine, by withdrawing too large a portion of our inhabitants from agriculture. Our plans of defence should therefore be calculated to shield us from attack, with the least possible inconvenience to the people, and with the least possible expence to the public.



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P L A N S
FOR THE
D E F E N C E,
&c.

CHAPTER I.

*Of the Enemy's Means of Attack, and our
Advantages for Defence.*

SEPARATED from the enemy by the ocean, and superior to him at sea, we know that his army must be greatly deficient in two most essential requisites for attack ; namely, *ca- valry* and *artillery* ; because the first cannot be transported in great numbers without a vast fleet ; and only a very small proportion of the last, and these only, the lightest field

pieces, can be moved without a very considerable number of horses or cattle *.

THE French, in their late expedition against Ireland, it appeared, had corps of dismounted troopers with accoutrements on board their ships, but no horses; and they had also field artillery, but were obliged to depend upon finding in Ireland, not only horses for their troopers, but also horses or cattle to move their guns, ammunition, provisions, and baggage;—an equipment, altogether, of enormous magnitude, and which even the sovereign of a country, with all the resources of it at command, could not soon put in motion, without previous arrangement and considerable delay. How then were the French to be

* *Cattle* are used in the East Indies for dragging artillery, waggons, and carts; also for carrying baggage, grain, &c. loaded upon their backs, and are soon trained to those uses; but nearly double the number of cattle are required to drag or carry the same weight as horses.

furnished with the means of moving their army, and of advancing into the country? Without the prospect of assistance from a deluded people, the plan was impracticable: and could they imagine that Ireland would actually plunge the dagger into her own bosom, to admit a band of robbers to reform her government *!

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* *General Hocbe*, after returning from his unsuccessful expedition, gave such instructions to *Colonel Tate*, who commanded the force sent to Wales, as may give us a pretty accurate idea of what his own proceedings would have been had he made good his landing in Ireland.—He instructed *Colonel Tate*, at great length in writing, to endeavour, upon his landing, to excite the poor against the rich; and his expressions in classing them are, *Artizans, Manufacturers, Vagabonds, and worthless Characters, and even Criminals*. Having set them on to plunder and murder the rich, this enlightened general then tells the colonel, that he must burn the *shipping*, and destroy all *manufactories and collieries*, that the people (who he suspects might be disposed to relent and return to their way of gaining an honest and certain livelihood) may have no resource left but in plunder!—Were not the barbarians, who overran the civilized parts of Europe in the 5th, and 6th century, a humane and generous enemy compared with the nation who can authorize such warfare?

LET us now consider the local and other advantages of the three kingdoms which the French are attempting to invade.

ENGLAND is naturally strong from its dangerous coast, in general difficult to approach; from the diversity of the country in hill and dale, intersected with rivers; and, above all, from the numerous enclosures into which the face of the country is divided, every field affording an intrenchment, or being capable of defence as a redoubt.

SCOTLAND has the same advantages of coast and rivers; also of enclosures along the coast and in the dales, while the interior country, at no great distance from the sea, affords every where positions most favourable to defence, beyond which it becomes so mountainous as to have been found impregnable in every age.

IRELAND, open to the Atlantic Ocean, and deeply indented with large bays, is far more exposed to invasion than either of the other kingdoms; but it has the advantage of larger rivers, with chains of mountains, of lakes and morasses, which divide the country in the most favourable manner for defence; and, fortunately for the safety of Ireland, those parts of the coast, which are most accessible to an enemy, are the least fertile; and the stock consisting almost entirely of horses and cattle, which are speedily removed, an enemy, if due precautions be taken on our part, would, on his landing, find himself in a desert; a circumstance of infinite importance, especially as his inferiority at sea must render his supplies of provisions from his own ports extremely precarious.

BESIDES the local advantages which have been stated, there is another which is common to the three kingdoms. The princi-

pal towns, in all of them, particularly the capitals are retired from the ocean, and situated on navigable rivers, friths, or bays, sheltered from sudden attack; and where our *WOODEN WALLS*, and gallant seamen, whether in ships of war, in floating batteries, or gun boats, would aid most essentially in the defence.

From this description of the local advantages of the three kingdoms, and of the troops of which the invading army *must* be composed, consisting chiefly of infantry, it is at once evident, that, with due precaution on our part, no doubt can be entertained of defeating his attack. A body of regular forces, such as is stationed in each of the three kingdoms, well equipped in field artillery, and with the aid of a powerful corps of pioneers to oppose and obstruct the enemy in front; an host of yeomanry cavalry, and volun-

teer infantry, to gall their flanks and harass
 their rear, supporting a corps of light troops
 and light artillery, acting on the same service:
 in short, possessed, as we are, of a more *active*
 force, and far exceeding the enemy in *num-*
bers, it is impossible they could penetrate
 far into the country, or collect forage and
 provisions sufficient for their subsistence;
 and, if ever their army advanced so far
 from their magazines on the coast as to be
 unable to protect their convoys, which
 would probably happen at the distance of
 about twenty miles, that is, after a march
 of several days, their general must then en-
 deavour either to make good his retreat,
 or, what is more likely, as their ships could
 not remain upon the coast, be reduced to
 the necessity of begging for quarter, and
 imploring his fortunate adversary to allow
 him to lay down his arms.

CHAPTER II.

Arrangements for augmenting the Military Forces by Corps of Volunteers.

HAVING shown that, in a defensive war, a regularly disciplined army, equal to that of the enemy, is not so necessary as a *numerous* irregular, but *active* force, which may circumscribe his position, obstruct and harass his movements, it consequently follows, that the most effectual means of augmenting our military forces, for the purpose of repelling invasion, are by arming a considerable portion of the resident inhabitants of the country.

THE act of Parliament passed during this war (in April 1794), called the Volunteer

Act, seems to be wisely adapted for obtaining this important object, as it enables men of all ranks, who are well affected to Government, to become instructed in the use of arms, and to be formed into corps under the Lords Lieutenants of the counties, without subjecting them to military discipline, or even to much inconvenience, unless in the event of actual invasion, or internal disturbance. Volunteer corps may thus be formed of the following descriptions.

CAVALRY.—Troops of cavalry, consisting of gentlemen who keep horses, may be speedily formed in large towns, as we have seen in the instance of the Light Horse Volunteers, instituted in London in the year 1779, and since augmented, forming now a regiment of six troops. This corps affords likewise an eminent example of the facility with which intelligent persons, who are good horsemen, acquire a proficiency in

cavalry discipline, not only sufficient for the purpose of quelling internal disturbance, where an hundred armed citizens have more effect than a thousand soldiers, but also for rendering them formidable against an invading enemy.

SIMILAR corps are formed, or forming, in the cities of Dublin, Edinburgh, and Glasgow; and it is much to be wished that their numbers were more considerable; not because they are raised and maintained without expence to Government, although that be also of great consequence, but chiefly because corps, composed of persons of such zeal and intelligence, are a most valuable addition to our military force, and might be expected to render signal service in defending the country against an invading enemy*.

* The gentlemen who form these corps might consider how far it would be proper to have their servants, who are trust-wor-

TROOPS of cavalry may also be formed in the country parishes, consisting of the gentlemen residing in the country, of farmers, and other persons, who can mount themselves on good horses. In order to prevent such corps from interfering materially with the operations of agriculture, the persons who enrol to serve in them might assemble less frequently than in towns; and if they could dedicate only a few hours once or twice a-week to discipline, they would soon feel confidence in their strength, and be enabled to act either as a body, or in detached parties.

THE only arms, which appear to be necessary for the Volunteer Cavalry, are a sabre and a pair of pistols. Their having good saddles, and their holsters well fixed,

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thy, and good horsemen, also armed and disciplined, and who might fall into the rear rank behind their masters.

so as to be clear of their knees, is of importance ; and still more so their having proper cavalry bridles, without which it is impossible to command their horses. Their uniform ought to be plain and cheap ; and in particular, they ought to be provided with a good cloak, which may protect them in bad weather, and be an useful covering instead of a blanket at night *.

THE discipline of the Volunteer Cavalry, particularly of the troops formed in the country, should be as much abridged as possible, and their attention immediately directed to what is most important. It is of little consequence in what position they ride, if their seat be firm. Let them be accustomed separately to fire their pistols and wield their sabre at full gallop ; let them

* The cloak, when not wanted, if strapped on before instead of behind the rider, will not gall the horse, and will afford some protection to the man, as balls which would have probably wounded him, have often after an action been found in the cloak.

next support each other, two and two, one man behind, with his sabre drawn, while the other fires his pistols ; and afterwards attack in parties of eight or twelve on the same principle ; the one party remaining formed, or moving in order, while the other charges, or breaks loose to skirmish. It is probably in such parties that their services would be most efficient *. The troop should also be taught to advance and charge in line ; to form a column by quarter ranks to the right or left flank, or, upon either flank, to the front ; and to change their front to the right, to the left, and to the rear. It is sufficient that these movements be performed readily ; precision in small

* The Mahratta cavalry in the East Indies, which, from their great activity, are reckoned the most formidable irregular cavalry in the world, are divided into parties of about twelve. One of them carries a small flag upon a lance, which the others follow ; several of these parties push at the same object in different directions, and they gain a post, cut off or surround a party of the enemy with more rapidity in this manner, than any troops could do advancing in regular order.

bodies is unnecessary, and cannot be easily attained †.

INFANTRY.—The regiment of Royal Edinburgh Volunteers, instituted in the year 1794, affords the noblest example that can well be imagined, of both patriotism and discipline. This corps consists of men of the first talents in the learned professions, and of respectable merchants and tradesmen in every branch of business. It was the first volunteer regiment of infantry formed in Great Britain; and headed by the chief magistrates of the city, distinguished by their firm, but temperate conduct; this corps, without bloodshed or violence, checked the progress of illegal inno-

† The Address to the Yeomanry of England, by a Field Officer of the Cavalry, said to be written by Colonel Crawford, contains an excellent abridgment of cavalry discipline, and cannot be too strongly recommended to such corps. Printed for J. Walter at Charing-cross. London, 1795.

vation, and gave time for reason to resume her seat in the minds of deluded men, whose infatuated conduct threatened their country with ruin. The Royal Edinburgh Volunteers clothed themselves in uniform, and even provided their arms at their own expence; but when the corps became more numerous, arms could not readily be purchased, and were issued from the public arsenals. It was found afterwards necessary, that pay should be allowed for a serjeant and a drummer for each company, which is all the expence paid by the public for this excellent regiment, now consisting of about 1200 most respectable citizens, who justly pride themselves on being well disciplined soldiers. This laudable example was followed by the like measures in Glasgow and other principal towns in Scotland, where the inhabitants have for more than two years, been associated in well disciplined corps, serving

without pay. The invasion, with which this country has been threatened, has made it necessary in Scotland, where we have no militia, to embody volunteer corps of infantry upon a plan still more extensive.

At the time the volunteer act was passed, an arrangement was made by government for forming companies of infantry to man batteries on the coast, by which the officers were allowed two days pay, and the non-commissioned officers and privates two shillings a week. This allowance enables a numerous class of well affected subjects to come forward in defence of their country, who could not otherwise afford to dedicate so much of their time to military discipline; and upon this plan a number of corps have been raised, which may be increased to any requisite amount. They assemble for exercise, either two days in the week, six hours each day, or two hours

every day, which last method does not interfere materially with their occupations in towns ; and going to exercise *heart* and *hand*, the time allotted soon brings them into a state of discipline*. The officers in several of these corps have generously given up their pay for purchasing better clothing for their men, than could be furnished merely with the allowance made by government for that article, and for providing occasionally for the families of individuals belonging to the corps, who, from

* The pay and allowances of these corps will be found detailed in a very useful publication, entitled, "Hints for the Economy and Internal Regulation of the Volunteer Companies of Scotland," by Lieutenant Colonel Crichton of the 1st Battalion of the 2d Regiment of Royal Edinburgh Volunteers. This officer (who served with great credit in the American war) was of the most essential service in the formation and discipline of the 1st Regiment of Royal Edinburgh Volunteers, to which he was adjutant ; a duty which he executed with indefatigable zeal, without pay or emolument. His new Battalion is already, in three months, an admirable instance of the facility of forming volunteer corps upon the more extended plan which has lately been adopted.

sickness or misfortune, may stand in need of such assistance; and if the corps should continue some time established, that fund would be sufficient to afford relief in time of peace to the men, who, from infirmity or misfortune, might stand in need of such assistance, in case their conduct has been satisfactory to their officers during the war. The Renfrewshire Regiment first introduced this humane and excellent institution in the regulations of their corps!

THE discipline of the volunteer infantry ought, like that of the volunteer cavalry, to be immediately directed to what is most essential, and may qualify them to be soon useful upon service. Every man can use a bayonet without previous instruction, but in order to use it with advantage, he must be accustomed to march and charge in line; first in his company, and afterwards in battalion. Let the company be divided

into four parts or sections, of probably five or six files each, and be accustomed to wheel and march by sections to its right, to its left, to the front, and to the rear, preserving the full interval between the sections. Let them diminish the front of the sections to files, and increase it again upon the march. Let them change the front upon the flank section, or halt and form the line*.

THESE manœuvres are equally applicable to a company or a battalion; they are in fact all that are generally practised upon service, and will not only qualify the corps, of whatever numbers it may consist, to be moved in order to and from the field of exercise, or any greater distance, but will immediately impress the men with a just

* See the Regulations for the Discipline of his Majesty's Forces, in which the formation of the company, and the method of executing all movements, are described.

idea, that their strength depends upon their being united and keeping their order.

THE men must be taught separately to prime and load their muskets in the manner directed in the platoon exercise; and as soon as possible should be made to fire ball at a mark, first with a rest, and afterwards without it. They should be accustomed to line a hedge in parties or companies, the front rank man firing, while the rear rank man continues loaded, supporting each other, two and two, in that manner, by which means no man need fire without taking aim, and half the company or battalion will be always loaded.

THE position of the foldier under arms, his carriage in marching, and the firing well by platoons, or greater divisions, are circumstances which have a fine appearance upon a parade, and at a field day; but the true tests of discipline are the rapidity

of movement, consistently with order; and the number of shot which a company will, *man by man*, put into a target.

ARTILLERY.—A corps of artillery, consisting of one or more companies, may be formed in the same manner as the infantry. In Edinburgh, two such companies have been formed, in which several of the most eminent members of the University, and many other gentlemen of talents, have inrolled themselves; and have given rise to an establishment, which, besides its evident utility as an addition to our strength, may, by engaging the attention of men of science in the study and practice of artillery, be the means of suggesting farther improvements in gunnery.

ARTIFICERS.—The corps of Engineers would require a considerable number of artificers for assisting in the constructing of

temporary field works, for the management of pontoons, or temporary wooden bridges, and for repairs in the forts in case of an invasion.

MOVEABLE frames of wood, for speedily constructing redoubts and batteries, were invented by the late celebrated Colonel Moncrieff of the engineers, and would be of great utility in the defence of the country*. A body of artificers, consisting of joiners, blacksmiths, &c. would be most usefully employed, in preparing pontoons and constructing such frames. They ought to be inrolled and divided into companies, under officers of the engineer department, ready to assemble for service.

* Lieutenant Wilson of the late 71st Regiment, now a surveyor at Stirling, a man of great merit, who was an assistant to Colonel Moncrieff in America, where he was severely wounded, has furnished Government with accurate drawings and descriptions of these moveable frames. He has also, with great zeal, made an offer of his services in the field in case of an invasion.

PIONEERS.—Colliers, and miners of every description, also labourers accustomed to ditching and draining, would, as pioneers, form a most useful body for the defence of the country. They should be inrolled and divided into companies, commanded by the overseers under whom they are employed; but the field officers ought to be men of experience, who have been opposed to an enemy in the field; and such officers well know that a body of good pioneers are actually of more essential use in war, particularly in a defensive war, than the like number would be of disciplined troops. This body cannot be too numerous, and may comprise all the able bodied men accustomed to hard labour, who may not have been instructed in the use of fire arms.

PIKES, which are no encumbrance, and are snatched up in a moment, would be the best arms, not only for artificers and

pioneers, but also for the companies of artillery; and, in their hands, would add essentially to the defence of cannon and field works.

CHAPTER III.

Of Forts and Batteries, Floating Batteries and Gun-Boats.

FORTS are either very advantageous, or very prejudicial in the defence of a country.

A FORTRESS of strength, situated near that part of the coast where an enemy is likely to make his descent, or near the line of operation which he must occupy, that is, the line by which he must advance from the coast to the capital, is of great importance; because it checks the progress of an enemy, who must lay siege to, and reduce it; or if he ventures to leave it behind, he must employ a considerable part

of his force to blockade it, otherwise his line of operation would be exposed to constant attacks, and his convoys intercepted in their way from the coast. On the other hand, small forts in the situation described, incapable of containing or affording protection to a considerable body of troops, and of long resisting an invading enemy, would be extremely detrimental, as they would, when taken, greatly strengthen the enemy's line of operation, and facilitate his progress into the country. Therefore, upon the commencement of a war, the forts, which may appear to be essential for the defence of the country, ought to be completely repaired and victualled for a siege, or they ought to be entirely dismantled and abandoned.

UPON considering what has been stated, it will appear to be particularly dangerous, in the defence of an island, to have a for-

trefs contiguous to the coast, because the enemy can bring his cannon and whole force against it, and supply his army during the siege without the assistance of land carriage. Such dire experience had there been in Scotland of this inconveniency, that in 1567, an act of parliament was passed in this kingdom for demolishing the castle of Dunbar, and the fort of Inchkeith, to *prevent their being of any use to an enemy*. The fortifications, for the defence of the dock-yards in England, can therefore be justified only by necessity, and ought to be kept within the least possible bounds, else a considerable part of the army may be made prisoners in defending them; and they will become strong holds in the hands of an enemy, in which he can maintain himself while his communication continues open with the ocean. But if forts of considerable strength are situated in the interior part of the country, between the coast and

the capital, their importance would be great, because the enemy must be enabled to move his battering train and army before they can be attacked, and if he attempts to pass them, they would be the means of intercepting his supplies, and may soon force him to retreat.

BATTERIES.—The reasoning respecting forts upon the coast, if well founded, will be equally applicable to batteries. Indeed it is impossible to line the coast of an extensive country in such a manner with batteries, as to protect it from an invading enemy; for they can be placed in few situations in which they may not be avoided; and if otherwise, the guns in them are in general so unwieldy, and difficult to traverse, that they may be approached and stormed without much danger to the assailants. Batteries ought therefore to be erected with great caution, and perhaps on-

ly in situations strong by nature, where they may not be easily surpris'd, or attacked on the land side. They ought all to have a furnace for heating shot, which is so formidable to shipping; and as the guns are to be pointed against a moving object, the batteries ought to be constructed *en barbette**, and the gun carriages so contriv'd as to be easily traversed, or be provided for that purpose with blocks and tackles, as used in the ships of war†.

FLOATING BATTERIES are made of the hulks of ships of war, and are moored in a frith, bay, or river, which may be too wide

* With a low parapet, without embrasures, so that the guns can be pointed in any direction within the scope of the battery.

† Lieutenant Colonel Rudyerd of the Royal Engineers suggests a most ingenious idea for facilitating the traversing of heavy guns upon garrison or sea carriages, which seems well deserving of trial; by means of a ball of iron to work in a socket of brass, with friction rollers let into the socket to ease its motion. This ball and socket to be fixed in the transom of the carriage, instead of the hind trucks.

to be defended by guns from the shore, on either or both sides; and into which, if not so defended, the enemy might send flat-bottomed boats, or gun-boats to burn shipping, or attack a town *.

GUN-BOATS are commonly of a size to carry one or two heavy guns, eighteen or twenty-four pounders, in the bow or stern, perhaps in both, with carronades of the same caliber †, four or five on each side. They are vessels of about one hundred and fifty tons burden, rigged with either one or two masts, best with two, in case one of them should be damaged, or carried away by the enemy's shot. Gun-boats of this size might be useful against the enemy,

* In the entrance of harbours, or narrow channels, *Booms* will add to their security, and prevent a surprise.

† A carronade is a short light gun, invented at the Carron foundry in Scotland, which carries a ball of the same size or caliber as the long heavy gun, but does not throw it with precision to a considerable distance, and is therefore only useful when near an enemy.

were they to send over troops in boats, and to attempt a descent, unprotected by ships of war ; but their chief use would be probably in obstructing the supplies of an enemy from being brought by water carriage up friths or rivers, or across lakes, and thus acting upon his line of operation, after he had landed ; or by flanking his line of march whenever it might approach within their reach.

FLOATING batteries and gun-boats will be readily manned by the ferrymen, fishermen, and resident seafaring people in the neighbourhood, who have every where most zealously offered their services, and ought not only to be previously inrolled, and appointed to their respective stations, but assembled frequently, and taught the gun exercise. The masters of vessels, and their crews, who might be in port at a time of danger, would also, with their usual spirit,

assist in this service. That we might in no case lose the aid of such valuable men in the defence of the country, it would be expedient to have travelling carriages in readiness for the long guns belonging to the gun-boats, which, for that reason, and for being more manageable in the boats, ought to be brass; and, if the enemy's plan of attack should prove such as to render the gun-boats of little use, the men, and part of the guns, might thus be brought into action on shore.

UPON the whole, although every measure which can contribute to the defence of the country, be highly deserving of attention, we ought ever to have it in view, that a vigilant fleet at sea, and a numerous active army on shore, with a distribution of *field artillery*, always in readiness near the coast, are the best and only certain means of defence.

CHAPTER IV.

*Communication of Intelligence, and Expediency
of Alarm Signals on the Coast.*

INTELLIGENCE.—The importance of having early notice of the enemy's approach needs little comment, especially where a considerable part of the army consists of volunteer forces, who have to quit their homes and occupations to take the field; and if it be considered, that a prompt and accurate communication of intelligence would enable us to defend our coast and country with more confidence, and with a smaller force, such an establishment might be considered as a great means of saving, rather than of increasing expence.

TELEGRAPH.—This invention is the most perfect method of conveying intelligence, which has ever been suggested, or can be easily imagined. It unites secrecy with celerity, and communicates every circumstance necessary to be known. Upon receiving intelligence in this manner, measures may be immediately taken to meet the danger, according to its magnitude, and that too without exciting a general or unnecessary alarm in the country *.

SIGNALS.—Flags and large balls, hoisted upon a pole and cross trees, are used at the head lands, for communicating with cruizers and conveying their intelligence along the

* The telegraph appears to have been known to the Greeks, and has lately been successfully revived and improved by the French. It may be applied to many useful purposes, besides the conveyance of intelligence, such as the apprehending of criminals, spies and deserters. It might be also employed by individuals in pressing business, and in that manner the annual expence of the establishment might be paid, or, like the post, even afford a revenue to Government.

coast. A line of such signals might also be brought from the coast to the capital, but they would prove to be a very inferior kind of telegraph, and, requiring the constant attendance of several men at each station, could not be established at much less expence.

BEACONS are an ancient and prompt method of giving *general* warning of approaching danger, and may be established at a small expence; but the intelligence they convey is indefinite, and they are liable to error, because fires upon hills in the same direction, particularly at night, might give rise to groundless alarms.

WHETHER the telegraph, signals, or beacons be adopted, the first station should be on a head-land favourable for descrying the approach of an enemy, and upon a part of the coast near a port, or which may

be easily approached by our cruizers. It must be under the charge of an officer of the navy, or other intelligent person, bred to the sea service, who will know the enemy's ships by their rigging and other circumstances, if even sailing under our colours, and who will also readily understand the signals from our cruizers, as previously settled by the admiral on the station.

THE telegraph, or signals by flags or balls, may give intelligence of even a privateer, and would often be the means of their being captured; but beacons must be lighted only when the fleet of an enemy approaches the coast in great force, and when it is necessary that the country ought to prepare immediately for its defence.

WHETHER regular chains of signals be established or not, it would be of great moment to have some alarm posts upon ele-

vated stations along the sea coasts, where beacons may be lighted, or signals made, for driving off the horses and cattle, and removing whatever might be useful to the enemy ; a measure of the greatest importance, and which ought to be executed with the utmost possible expedition. A flag might be hoisted at the same time that a beacon was lighted, the lowering of which should afterwards denote, that the enemy had been foiled, or had not persisted in his attempt to land, when the measures taken for clearing the coast would consequently cease. Or, instead of lighting beacons, cannon might be fired, upon hoisting the flag, to attract the attention of the country.

PATROLES are a *fourth* method of communicating intelligence of the approach of an enemy, but far inferior to the plans which have been mentioned.

For this purpose, parties of cavalry are stationed along the coast, each in charge of an officer; and parties are also stationed at the several stages between the coast and the capital.

THE parties on the coast furnish patrols, or videttes, who acquaint their officer when any number of ships approach the coast; he then goes himself to see what has been reported to him, and, if in his power, he ought to consult with seafaring people, before he writes and sends off his report, which is then forwarded by relays of troopers, one being always in readiness at every stage to the capital.

CHAPTER V.

Arrangements for accelerating the movement of Troops; for Driving the Coast; and for forming Magazines in the interior Country.

CARRIAGES.—The spirit and patriotism, which incite the inhabitants of these kingdoms to take arms in defence of their happy country, would also induce such of them as are possessed of horses and carriages, to give their assistance in forwarding the public service, in case of invasion. This was done lately in Ireland; similar offers have been made of carriages of every sort from all parts of Scotland; and there can be no doubt, that the like aid, if not already of-

ferred, would not be less readily given in England *.

THE advantage to be derived from the rapid conveyance of troops and artillery, from one place to another, is evidently of great importance; and with such means at command, together with early intelligence of the approach of the enemy, a general is not only enabled to afford more extensive protection to the coast; but what is of still greater moment, a smaller force will thus be adequate to the defence of the country.

IN order to avail ourselves readily of this resource for accelerating the move-

* In Scotland, Mr. Robertson, farmer in Granton, who writes the excellent Report of the State of Agriculture in Mid-Lothian, had the merit of first offering his carriages in January last, and of suggesting this important aid for the defence of the country.

ments of the army, and to do so with the least possible inconvenience to the inhabitants, who have made these offers, the Deputy Lieutenants ought to have lists prepared of the number of horses and carriages within their districts; and when an exigency occurs, these ought to be required from each person and district, in such proportions, as not to impede materially the necessary labours in the country.

It is to be understood, that, in case the carriages thus generously offered, should be wanted for a longer time than merely to assist for a day or two upon a particular service; or, in case the same carriages should be called for out of turn, or frequently, a liberal hire would be paid for them by government.

THERE is only one occasion, upon which it would be necessary to call for the whole

of the horses and carriages in any county, and which comes now to be stated.

DRIVING THE COAST.—The alarm being given of the enemy's approach, not only the yeomanry cavalry, and volunteer infantry, but also the owners or their servants, with their horses and carriages in the counties upon the coast, ought to quit their usual employments, and get in readiness to assist in executing the necessary measures for the defence of the country, providing subsistence for men and horses for two days.

UPON this occasion, there are two principal objects of attention; the first and most material is, to drive the live stock, such as horses, cattle and sheep, from the coast; the second is to remove the flour or meal, provisions of every sort, grain or forage, out of the reach of the enemy; but

this must not be persevered in so long as to risk their seizing the draught horses and carriages.

IN order to accomplish this important service, in a prompt and regular manner, the following or similar arrangements, as required by the King's instructions to the Lords Lieutenants, will be previously settled by them, in their respective counties.

I. THE coast should be divided into districts, which each of the Deputy Lieutenants should have the charge of seeing cleared, and which would probably differ from the usual division of the county into districts.

II. AN account should be taken of the stock of every sort in each district, in order that the farmers may be paid for whatever may be wanted for the public use, or destroyed to

prevent its falling into the hands of the enemy.

III. THE Deputy Lieutenants should have persons instructed, who live within sight of the signals, to ride into the inland parishes, and give warning of the alarm upon the coast.

IV. THE places are to be fixed to which the live stock is to be driven, and the towns in which the grain and forage are to be stored, upon being moved from the coast.

OTHER particulars would no doubt occur, which deserve attention ; having it always in view to provide for the public safety, with a strict regard to justice, and the indemnification of individuals.

WHATEVER cannot be moved, which

would be useful to an enemy, within a certain distance of the coast, such as unthreshed grain, hay, straw, &c. must, if a landing be made in great force, be set fire to and destroyed without compunction; and, as it might not be possible, either to remove or destroy the whole of the threshed grain, yet, in order to render such part of it as may be left of as little use as possible to the enemy, all the corn mills near the coast should be disabled, by breaking the upper millstone, a damage which may be afterwards easily repaired.

THE families which remove from the coast, upon the landing of an enemy, would doubtless be hospitably received by the people in the interior country; and it would be the duty of magistrates to exert their influence and authority, when necessary, to provide for their accommodation and subsistence.

MAGAZINES.—The grain and forage, upon being moved from the coast, in consequence of the appearance or landing of an enemy, ought to be stored in the towns behind the first line of defence, according to instructions from the Commander in Chief, and which would be probably at no great distance from the coast. Magazines for the army would be formed in this manner, without previous expence, and may be afterwards moved to places of greater security; and, the country being always cleared as the army retires, the magazines would be replenished, and the difficulties of the enemy would increase, as he advanced farther from the coast.

THE charge of the magazines ought to be intrusted to men of talents and character, previously appointed for that purpose, who will not only husband the public stores with scrupulous economy, but may

be also qualified to devise the best means of bringing forward such farther supplies, as would be wanted from the interior country.

CHAPTER VI.

The disposition of an army depends upon the relative importance of the several places which are to be protected against an invading enemy, and the number of points from which he may wish advantage direct his at-

tempts. The army must therefore be formed into several divisions, advanced towards the most accessible and most vulnerable parts of the country, in such manner, that they may mutually support each other, and that

be also qualified to devise the best means
 of bringing forward such supplies
 as would be wanted from the interior

CHAPTER VI.

Disposition of the Army, and Defence of the Country against an Invading Enemy.

THE disposition of an army depends upon the relative importance of the several places which are to be protected against an invading enemy, and the number of points from which he may with advantage direct his attacks.

THE army must therefore be formed into several divisions, advanced towards the most accessible and most vulnerable parts of the country, in such manner, that they may readily support each other, and that

all, or several of the divisions, may finally concentrate for the defence of the capital.

In order to give the more effectual support to the several divisions of the army, a reserve of considerable force must be stationed in their rear, probably in, or near the capital; like the centre of the arc or segment, which forms the main line of defence.

It is not necessary that the several divisions of the army, which have been mentioned, should be collected in one place; on the contrary it may facilitate their subsistence, and also their giving more immediate support to each other, if they extend to their right and left; and in case of their being at any distance from the coast, it would be necessary to have detachments in their front.

THE main divisions of the army ought not only to be each of them a regularly constituted, military force, consisting of Cavalry, Infantry, and Artillery; but also to have a proportion of the Yeomanry and Volunteer Corps of the neighbouring counties, under the orders of the same general. A considerable body of Artificers and Pioneers should be likewise in readiness to join it on the shortest notice.

HAVING thus endeavoured to give a general idea of the disposition of an army fit to protect a country against invasion, we shall attempt to describe the measures which may be adopted in defeating the attack.

UPON the first notice of the approach of the enemy to the coast, the division of the army, stationed in that quarter, will of course march instantly to oppose their landing, while the volunteer forces prepare to fol-

low; part of them to join the regular forces, and part to assist in clearing the country of whatever might be useful to the enemy.

As it may be expected that several feints will be made by the enemy upon different, perhaps distant parts of the coast, and it may be for some time doubtful which is meant to be their main attack, caution will be necessary in drawing any of the other divisions of the army from their respective stations.

In marching against an enemy, it is of infinite importance to avoid being encumbered with unnecessary baggage, and to move without hurry in the most regular order.—Excellent instructions have been issued for this purpose by his Royal Highness the Commander in Chief, printed and distributed to all the corps, and which will

be found to be of the greatest use in facilitating every operation of the army.

THE landing of an enemy in considerable force, even ten thousand men, with artillery, ammunition, intrenching tools, provisions, camp equipage and baggage, is not to be effected in a few hours; but is a tedious, a dangerous, and most difficult operation, liable to be thwarted in many ways during its accomplishment.

ALTHOUGH it be the established principle of a defensive war, to avoid a general action with the enemy, yet no opportunity must be lost in attacking his forces in detail; that is, part by part, whenever it can be done without risking a signal defeat. No opportunity can therefore be more favourable for attacking the enemy with advantage, than while he is attempting to land his troops; for it is not only impossible for

him to land the whole of his force at once, but the several divisions of it, after they have landed, must remain chained, as it were, to the coast, until the whole are ready to advance; which circumstance, together with his deficiency in cavalry, enables us to attack him boldly, because we risk nothing from a pursuit.

—UPON advancing to the coast, it will be of importance to take a position as near as possible to the shore, to plant cannon upon every spot which commands the bay, and to throw up such works as may add strength to the position. The enemy's fire from their ships and boats, although greatly superior to ours, is not to be dreaded, as the motion of the sea must render their aim extremely uncertain, particularly in crowded vessels, while almost every shot of ours may be expected to take effect. Whenever

the enemy approach the shore, and begin to land, a considerable part of our forces must advance from their intrenchments, and attack them as they disembark; which may be done with the greatest confidence, because the fire of their artillery must then cease, at least from their boats which have approached the shore, and it will be some time before their men can be in such order as to use their muskets with effect.—Spirited, determined conduct, at this juncture, will doubtless be decisive of success; and the enemy, however brave, must yield to our superior advantages, and be driven again into their boats.

CÆSAR describes the difficulties of an invading army in terms which, although the event was different, will elucidate these arguments.

“ THE conflict was maintained with ob-

“ stinacy on both sides. The Romans,
 “ however, could not preserve their ranks,
 “ they had not firm footing, and, in place
 “ of joining their respective standards, were
 “ obliged, in quitting the ships promif-
 “ cuously, to attach themselves to the first
 “ they happened to meet with ; in conse-
 “ quence of which, they were thrown into
 “ great disorder. On the other hand, the
 “ enemy, being acquainted with the shal-
 “ lows, pushed in their cavalry, whenever
 “ they perceived the troops from any ship
 “ debarking separately, and attacked them
 “ before they were in a situation to defend
 “ themselves. Sometimes numerous bo-
 “ dies advancing surrounded a small par-
 “ ty ; and sometimes, availing themselves
 “ of an exposed flank, they poured in their
 “ missiles on the whole line. When Cæsar
 “ observed this, he manned the boats of
 “ the gallies and the small reconnoitering

“ vessels * with soldiers, and sent them to
 “ the support of those who appeared to be
 “ giving way. As soon as our men had
 “ gained the beach, the whole army ad-
 “ vanced, charged the enemy, and put
 “ them to flight ; but it was impossible to
 “ continue the pursuit *for want of the ca-*
 “ *valry*, which had not been able to pro-
 “ ceed on their voyage and reach the
 “ island. This circumstance alone pre-
 “ vented Cæsar’s complete, and wanted
 “ success.”

Is it not evident, if our ancestors had
 been equal to the Romans in discipline, as
 they appear to have been in courage, that
 they must have driven them back to their

* The reconnoitering vessels were of a small size, used to
 explore the enemy’s coast or fleets ; they were usually painted
 sea-green, and their crews wore a uniform of the same colour,
 the better to escape observation.

boats, and forced them to quit our shores with disgrace?

INSTEAD of surrendering the island, as our rude ancestors did to the enemy, thinking all was lost after he had effected his landing, it is obvious, as we shall proceed to show, that his first success ought to have been considered of little consequence, and merely as a circumstance tending to protract, but, by no means, to render doubtful his final defeat.

SUPPOSE the enemy to have landed and taken post with *part* of his army before our forces could reach the coast, his intrenchments ought, if possible, to be instantly stormed; but, if that does not afford a reasonable prospect of success, we may still employ the time to great advantage, while he is engaged in landing the equipment of

his army, not only by harassing him day and night, and by laying waste the adjacent country, but also, by collecting and employing numerous corps of pioneers to obstruct his progress.

IN Cornwall, it is reckoned there are 80,000 miners; near Newcastle 60,000 colliers; and in the counties adjoining to Edinburgh, it would not be difficult to collect at least 10,000 colliers, miners, and able labourers. It may be easily imagined, and could be demonstrated, that, before a hostile army with all its equipments could be landed upon these coasts, such a body of pioneers, as might be collected at any of the places above mentioned, might encompass the invading army with a ditch and rampart, which it would be difficult, perhaps impossible, for them to pass. In every view, it is evident that these exer-

tions of labour would throw such impediments in their way, as would enable us to attack them with a decided advantage, whenever their army attempted to advance from the coast.

THE importance of such works, in circumscribing the movements of an enemy, is finely exemplified in Cæsar's operations, when he besieged Pompey in his camp at Durazzo. He threw a ditch and rampart, strengthened with towers, describing a circuit of above twenty miles around his adversary, cut off all his communications with the country, and having either dammed up the streams, or diverted their course, reduced him to great necessity for forage, and even water; and had not Pompey been master at sea, and supplied with provisions by his ships, instead of waiting for events which rendered him victorious, he must have risked a battle with evident

disadvantage, or been reduced to the necessity of laying down his arms*.

In case the enemy should land near a town, of which he must get possession before he can advance into the country, it ought to be fortified with temporary works, and may soon be put into a state of defence. Of this we have an eminent instance of modern date, in the defence of Savannah, in North America, against the French in 1779. During the interval of *twelve days*, while the Count D'Estaing, who had appeared on the coast with a fleet of twenty ships of the line, was landing his army, the British General, Prevost, collected his small and scattered forces, and works were constructed in front, and on the flanks of the town, by his chief engi-

* See Cæsar's Commentary of the Civil War, book iii. chap. 16.

neer Captain Moncrieff*. At the same time, Captain Henry of the Navy landed the crews of two frigates, an armed brig, and some transports, with guns and stores for the new works; and before their formidable enemy and his American ally were ready to open their trenches, which they thought the strength of our works made necessary, the British forces were fully prepared for their defence. After a regular siege of three weeks, and having opened batteries of sixty pieces of cannon against the place, the enemy determined upon an assault, which was led by the Count D'Estaing in person, in a most gallant and determined manner; but he was met with equal bravery on the part of the British troops; who, intrenched behind

* The moveable frames were used on this occasion which are mentioned on page 30. The French said, that the works of the English engineer rose like mushrooms, which spring up in a night.

their new works, defeated an enemy far superior in number with great slaughter*; and had our fleet fortunately come at that time upon the coast, the enemy would have lost both the fleet and army which had been employed in making this ineffectual descent.

WE shall now suppose, that the enemy has succeeded in establishing himself in a town or strong position upon the coast; and having landed the whole equipments of his army, proposes to commence his march against the capital.

IT is here necessary to remark, that an invading army upon a continent proceeds with a great body of cavalry, and

* The loss of the enemy, chiefly on the part of the French, was reckoned to amount to 2000. The British forces had only 40 killed and 67 wounded.

with a numerous train of battering and field artillery, advances from its frontier, where magazines of vast magnitude have been formed; and has an immense establishment of draught horses and carriages for the transport of artillery, ammunition, camp equipage, intrenching tools, and baggage; and, above all, for the conveyance of provisions. How different is the situation of an enemy who invades an island? He can have few cavalry, because the horses cannot be transported in great numbers; few cannon, because he cannot move them without horses; no great quantity of provisions, because forming great magazines is a work of time and difficulty, and requires his being possessed of towns on the frontier; and suppose he had provisions, how are supplies for many thousand men to be moved after him, when he has advanced into the country?

FROM what has been already stated, it is most probable that the enemy would exhaust his provisions before he was ready to quit the coast; but we shall suppose it otherwise, and that he puts his ill appointed army, for such it must necessarily be, in motion, to penetrate into the country.

ALTHOUGH unable to check the operations of the enemy, while covered and aided by his fleet, yet it may be expected, that by the time he is ready to advance from the coast, we shall have broken up the great and direct roads, have felled trees upon them, destroyed the bridges, formed inundations, and have thrown every obstruction in the way which could retard his progress. Our army would now be probably formed into several divisions, one of which would protect our main body of pioneers, and oppose the enemy in front,

the others, with light artillery, would draw round upon his most exposed flank, and be ready to attack his line of march. In order to harass him on one or both sides, or on his flanks with the greater facility, the cross roads should be left open, and even repaired, and openings made in the enclosures at convenient places, for the passage of troops and cannon. Under such manifold disadvantages, with what confidence could an enemy advance into the country? But still, having undertaken this enterprize, he must, with whatever labour or loss of men, strive to force his way to the main object of his attack, while we are prepared to harass him during his march with a superior artillery, a numerous cavalry, and with parties of infantry, from heights and from behind enclosures, retiring from field to field, and from hedge to hedge, without its being possible for him to bring us to a general action.

CÆSAR, in the account of his second invasion of Britain, describing the manner in which he was harassed by our ancestors, says, “ Another disadvantage was, that the
 “ enemy never fought in close battalions,
 “ but in small parties, at a great distance
 “ from one another, each of them having
 “ their particular post allotted from whence
 “ they received supplies, and the weary
 “ were relieved by the fresh.”

Plutarch, in his Life of Fabius Maximus, gives the following brief account of his conduct in opposing the invasion of Hannibal.

“ Thus prepared, he marched against
 “ Hannibal, not with intention to come
 “ to an engagement, but by length of time
 “ to exhaust the spirit and vigour of the
 “ enemy, and gradually to distress and
 “ weaken them, by properly improving

“ his superiority over them, in number of
 “ men, and plenty of money. With this
 “ design, he always encamped on the high-
 “ est grounds, where their horse could have
 “ no access: He carefully observed the
 “ motions of Hannibal’s army; when they
 “ marched, he followed them; when they
 “ encamped, he did the same; always
 “ keeping upon the hills, and at such a
 “ distance as not to be compelled to an
 “ engagement, by which means he gave
 “ them no rest, but kept them in a conti-
 “ nual alarm.”

These quotations are sufficient to show,
 that the principles of defensive war have
 been in all ages the same; and it is only
 necessary to modify their application ac-
 cording to circumstances. Instead of en-
 camping among the hills, as Fabius Maxi-
 mus did, in consequence of his being in-
 ferior to Hannibal in cavalry, we should

have no need to keep so far aloof from our enemy, and have only to choose strong positions at such a distance from him as to prevent a surprise. Even when he halts for the night, we must not allow him to rest, but have parties constantly employed to harass his camp, stealing upon him in every direction ; which we should be enabled to do from our superior knowledge of the country.

THE enemy, either in the course of, or after his second day's march, would probably find it necessary to detach parties to forage. These our superiority in cavalry would certainly enable us to cut off; but, without trusting to that success, our yeomanry cavalry should be constantly on the watch, to observe the quarter to which the foraging parties of the enemy were directing their march, and endeavour to anticipate them by setting fire to the dry forage,

and driving off cattle, &c. which may appear to be within their reach; and were they to stop in any situation, at a distance from their army, to cut green forage, their destruction would be inevitable.

IN opposing an invading enemy, many positions would occur at the crossing of rivers, and entry of defiles, where successful stands may be made against him. A chain of redoubts, defended by the infantry, artillery, and pioneers; the cavalry posted in the rear to cover their retreat, would render such positions long tenable; and would either oblige the enemy to attack them in front with great loss, or to detach a part of his army, which, in attempting to turn such post, might be surrounded and cut off; or the whole of his army might be obliged to change its route to one more circuitous, which might afford us a farther advantage,

in probably forcing him into a more difficult country.

OPPOSED in this manner, the enemy must fight his way, inch by inch, as he proceeds ; and his fighting men, having also to labour by turns as pioneers, in repairing the roads and intrenching his camps, he can advance only by slow degrees, and would probably find a very few miles to be a tedious and fatiguing march. His difficulties, far from decreasing as he advances into the country, would multiply in proportion to his distance from the coast ; and if we could but attack his convoys on their march, an enterprize easily accomplished when his line of operation comes to be extended, we should strike at him where he is most vulnerable, and at length force him to lay down his arms, or return for provisions to the coast.

SUCH is the plan of defence by which it is conceived an invading enemy must be certainly defeated ; and its outlines are given, without regard to the co-operation of our fleets, because, insulated as we are, our resources on shore are adequate to our defence, even when inferior at sea. That such is the case, has been ably demonstrated by General Lloyd in his masterly treatise on this subject, written in the year 1779, when the combined fleets of France and Spain insulted our coast *. And if we had then reason to have full confidence in our strength, surely circumstances are not so strangely altered as to create despondency, when our land forces are doubled in number ; and our fleets, after

* See Political and Military Rhapsody on the Invasion and Defence of Great Britain and Ireland, by General Lloyd, 2d edition, published in 1792 ; to which an excellent Supplement has been added by the Editor.

the most signal victories, are, even by our
 enemies, acknowledged to command the
 ocean.

CHAPTER VII.

Reflections on the Necessity of a permanent System of Defence for Great Britain and Ireland.

IN the course of the preceding Treatise, plans have been detailed for increasing the military forces by corps of volunteers, affording a respectable but only *temporary* means of defence for the united kingdoms; but seeing that those plans could not be adopted without considerable delay, and might not have been completed in time to meet the danger, it may be prudent to inquire whether we are safe in trusting to such precarious expedients; or, if we ought

not to endeavour to devise a regular and permanent system of defence for the country.

DURING the short respites of peace which these kingdoms have enjoyed, instead of preparing for what was but too likely to happen, *a new war*, we have reduced our standing army, our only military force in time of peace, to a mere skeleton, partly from motives of economy, and partly from its being considered as an unconstitutional establishment dangerous to our liberties; and this we have done without providing any other means for our security and protection.

UPON the breaking out of a new war, we find, alas! that we have no force. Every plan, however discordant in a general system of defence, is then adopted, and every means must be used to *raise men*: And even

rank in the army, which ought to be the sacred reward of service and merit, is sacrificed, and its discipline thrown loose to increase its numbers*.

AFTER the operations of the war have commenced, and some embarkations of the regular forces have taken place for foreign service, it is found we are too weak at home. Fencible regiments are then raised on various conditions, the most likely to effect the object speedily, and thousands of officers and men, who would otherwise be employed or enlisted in the regular army, are thus engaged for home defence.

LASTLY, Upon the appearance of internal commotion, or foreign invasion, per-

* This ruinous method of recruiting the army was immediately put a stop to by his Royal Highness the present Commander in Chief.

haps of both, it is justly feared that we are still too weak at home; and measures are then adopted as a last resort which ought to have been the foundation of the whole; namely, the providing for the defence and security of the country, by arming a proportion of the *resident* inhabitants: But this being also done upon the pressure of unforeseen events, the people are embodied as yeomanry and volunteer corps, under various forms, not affording a well constituted force, such as should give perfect confidence to the nation, and stability to public credit.

THESE are measures which have taken place, though not to the same extent, in the course of almost every war; and are, in fact, measures of necessity, arising from a want of preparation during peace, and from no adequate plan, besides that of our navy, having been adopted, or hitherto

thought necessary, for the permanent defence of the country.

It is readily admitted, that a militia is a force compatible with the liberties of a free nation, and that the inhabitants of every country ought to be trained for its defence ; but, in order that a *general* militia may not at once be rejected as a visionary scheme, not reducible to practice in these kingdoms, let us inquire if there have been, and if there are countries defended by such an establishment.

If we have recourse to ancient history we shall find that the states of Greece, and even Rome itself, were, during the periods of their freedom, defended by a militia ; in which every man, of an age to bear arms, who had a house, a family, or property, to protect, was enrolled ; and into which *it was an honour to be admitted.*

IN modern times, how have the Cantons of Switzerland preserved their independence, for ages, in the heart of ambitious and powerful empires? How have they been enabled to maintain military establishments of great magnitude, and nevertheless to increase their manufactures, and extend the cultivation of a naturally barren country? And how have these Cantons, containing only two millions of people, been enabled to furnish disciplined forces to the different powers of Europe, without reducing their strength, or endangering their domestic security? The answers to these questions are, shortly, that the Swiss have not preserved their independence by intrigues carried on at the neighbouring courts, but by a *barrier* of *bayonets*: that their military establishments have not checked the improvement of their country, because their discipline is made subservient to their manufactures and agricul-

ture; and that, from the redundancy of population, under a free government, supplies of well disciplined troops have been furnished for the service of foreign powers, trained from their youth, without hardship or severity, in the school of a general militia.

LET us next inquire by what means our valuable West India islands have been protected from invasion, and from insurrections of the slaves? *Not* by the handful of regular forces distributed in those islands; but, headed by them, the lives and properties of the inhabitants have been protected and defended by their militia. In Jamaica, lately, the fierce and stubborn Maroons were not subdued by the few regular troops stationed in that island, but by the exertions and activity of a militia, inured to the climate, and acquainted with

the inmost recesses of a wooded and mountainous country.

To bring the question still nearer home, How are these kingdoms, Great Britain and Ireland, to be defended against a military republic of inveterate enemies, in population double our number, and who have our country in their eye as the favourite and ultimate object of their ambition? *Not*, it is humbly conceived, by preserving an ideal balance of power in Europe, which, from the complicated and fluctuating interests of the different states, is at all times precarious, and seems to be at this crisis impracticable. *Not* by the noble perseverance of the Emperor, nor the eminent achievements of his gallant brother, for these advantages no longer divert the attention of the enemy *. *Not* by the exer-

* The Emperor has, since this was written, been so power-

tions of our brave and meritorious army, for it is, and must always be, chiefly employed in the defence of our distant possessions, or in foreign conquest. *Not* even by our victorious fleet alone, for it may be *evaded*; but with such a fleet at sea, and a well regulated *numerous* militia on shore, we may certainly bid defiance to the world.

- HAVING cited some examples, and stated the most obvious arguments in favour of a general militia, we shall now proceed to inquire upon what principles a plan so desirable may be established.

Laws and customs, it is well known, can seldom or ever be translated with success from one country to another; and there-

fully invaded by the French, as to be forced to quit his alliance with Great Britain, and make a separate peace.

fore, instead of attempting to adopt plans, however admirable, which have been elsewhere established, our attention must be directed to principles applicable to the circumstances and state of society in these kingdoms.

THE English militia has acquired such merited reputation for discipline and orderly good conduct; and is justly considered as so formidable by our enemies *, that no pains ought to be spared to preserve, and, if possible, to improve so useful an establishment. Under this system, a portion of the inhabitants, commanded by persons of rank and property, is embodied for the general defence of the country; and, dur-

* General Hoche, in his instructions to Colonel Tate, *denounces* the militia, and officers belonging to it, as persons particularly hostile to his system of anarchy and plunder.

ing war, becomes a part of the regular army.

THE militia in Ireland, although it has not been so long established as in England; has been formed upon the same plan; and it may be hoped will become no less distinguished by its discipline and good conduct.

THE fencible regiments which have been raised in Scotland, instead of a militia, during the last and the present war, are composed of nearly the same classes of persons as the militia is in England and Ireland; and form also a valuable addition to the regular force for the defence of the country. These corps, however, not being levied by ballot, their numbers cannot with certainty be increased upon emergencies; and, serving only during war, they cannot, like the militia, which is preserved in time of peace, be considered as forming a part

of an establishment for the permanent defence of the country.

THERE appears to be, in the militia and fencible regiments, two defects, common to both, considering them as forming our great national defence.

THE first defect is, that corps, embodied for service in this manner, draw men from their homes and render them regular soldiers, devoted solely to the profession of arms, so that forces sufficiently *numerous* for the effectual defence of the country cannot be embodied in this manner; because the expence of maintaining a great army, upon such an establishment, would be too burdensome to the state, and be the means of withdrawing too great a portion of the people from agriculture and manufactures.

THE second defect is, that such corps, being composed almost entirely of substitutes, have not, the officers excepted, that immediate interest in the defence of the country, and the constitution of its government, as a militia would have, if formed of a part of the *resident* inhabitants of the country.

THESE defects, inseparable from such establishments, may, as evinced by the experience acquired during this war, be effectually supplied by continuing the present volunteer system during peace, in such manner as shall render it honourable and desirable to men of property ; and, not only honourable, but also advantageous to men of inferior station, who have entered, or may be admitted, into these corps.— Thus, in addition to the *standing army*, and the *regular militia*, or fencible regiments, we may have a body far more numerous

than both, or all of them, consisting of the resident inhabitants of the country, of men fully sensible of their happiness, and strongly attached to the constitution of our government. This last force, which would in fact become the foundation of our whole military system, might be called the *General Volunteer Militia*.

THE danger of invasion may be doubtless expected to be far greater in future than it has been for many ages in this country; and it therefore becomes necessary to make adequate preparation for our defence; yet the advantages which we derive from our insular situation, are so important, and our population is so considerable, that it is not necessary, as in Switzerland, to include every man who can carry arms in our militia: And in these times, when many men (in Ireland, alas! a great many) are deluded with ideas of reform; not such

gradual and temperate reform as might be consistent with our present happiness and prosperity as a nation, but tending to the dismemberment and subversion of the British empire ;—at such a crisis, it may not be expedient to train all persons indiscriminately to the use of arms, especially under a system in which they could not be subjected to a strict and regular discipline.

For these reasons, it appears that a volunteer militia, which would admit of selection with respect to the persons composing it, might be a safe and practicable means of providing for the permanent defence of the country against both internal and external danger.

IN Scotland, having no militia, nor any such system of permanent defence, as forming a part of the peace establishment, it seems to be particularly deserving of con-

sideration, whether, upon the conclusion of the present war, an attempt may not be made to form a militia upon these principles; under such regulations as might enable the whole, or a considerable part of the respectable inhabitants already armed and disciplined, to continue formed in corps for the defence of the country; a plan which, if found expedient, might be afterwards, if not immediately, adopted in the sister kingdoms; and which, in addition to their regular militia, would probably in those kingdoms render the raising of fencible regiments, or supplementary militia, unnecessary in a future war.

AN able statesman, high in office, whose advancement has been attended with the most beneficial consequences to his native country, is sensible that a militia ought to be established in Scotland; but he is also sensible of the defects of these establish-

ments in the sister kingdoms; and has declared his readiness to support a plan for a militia in this part of Great Britain, which shall afford a solid and general protection to the country.

THE following plan, it is hoped, may contribute to the accomplishment of this great design: and the author being countenanced and assisted by the Lord Lieutenant of the county of Mid Lothian, a nobleman of the most exemplary zeal and patriotism; by the Commander in Chief in Scotland, distinguished by more than 50 years of reputable service; and by the Lord Advocate, eminent for his professional talents; shall proceed, without farther apology, to submit the details of his plan to the public*.

* The author has also to acknowledge great obligations for the assistance he has received in this treatise from his friends Colonel Mackay, Deputy Adjutant General in Scotland, and Major Wight of the 36th regiment, both officers of great merit and experience.

CHAPTER VIII.

Plan for a General Volunteer Militia.

ART. I. **T**HAT the corps of yeomanry and volunteers, who are now embodied, having rendered the most essential services to their country, both in preserving its internal peace, and in protecting it against invasion, it appears highly expedient, that they should be induced to continue established during the ensuing peace; under such regulations as may be consistent with the necessary occupations of individuals, and may, at the same time, preserve these corps in sufficient discipline, as an important part of the permanent defence of the country.

ART. 2. That these corps shall not be called out for service, unless in cases of great urgency; it being understood, that, on all occasions, they shall be detained as short a time from their homes, as is consistent with the nature of the service, upon which they are employed.

For the purpose of quelling internal disturbance, they shall not be required to march above miles beyond their respective counties; but in case of invasion, or the appearance of invasion, their services must necessarily extend to every part of the kingdom, for the protection of which they are armed*.

* The probability is, that the volunteer corps would not be required to march farther than they have engaged to do this war; but it may be easily imagined that such restrictions might become extremely embarrassing in case of an invasion, and might deprive us of the aid of the volunteer militia belonging to counties remote from the scene of danger.

ART. 3. That, in order to prevent uncertainty, as to the numbers and force which may be depended upon, it is necessary, that the volunteers should be inrolled to serve for a certain time, which shall be limited to one year; and the time for enrolment shall be each year from the 1st to the 14th of May. Persons who have served in the corps the preceeding year, and who do not withdraw their names during that fortnight, shall be understood as continuing in the corps the subsequent year.

ART. 4. That the summer months between feed-time and harvest, being in all respects the most convenient for the discipline of the volunteer corps, they shall assemble, from the 15th May to 15th July, in the same manner they have hitherto done; that is, for six hours for two days, or two hours for six days in each week,

during which time they shall be reviewed by the Lord Lieutenant of the county, and by a general officer appointed by the King, to report their state*.

ART. 5. That the officer shall, during that period, be entitled to two days pay in the week; and the non-commissioned officers and privates to two shillings a week, provided they give regular attendance.

ART. 6. That the volunteer militia of every county shall form a legion, consisting of *cavalry*, *artillery*, and *infantry*; all to be inrolled in the same list, and included for pay, in order that the allowance of those who generously decline receiving it, may increase the fund for the general benefit of the establishment.

* During these two months, the militia should parade without arms, on Sundays, and march with their officers to church.

ART. 7. That troops of cavalry shall be formed of those who prefer that service, and can mount themselves on good horses; and companies of artillery, to a certain extent, (at least one of 50 men in each county), of such as may prefer that department;—those who may enrol to serve in floating batteries and gun-boats, to be disciplined as companies of artillery; and the remainder, forming the infantry, in all towns where one or more companies can be assembled, consisting of 50 men, including officers.

ART. 8. That, in order to extend this system also to the country; and that the volunteer militia may be composed of every description of troops, requisite to form a regularly constituted and efficient military force, a number of men shall be inrolled in the country parishes and villages, to serve as artificers and pioneers,

who are to carry intrenching and other tools, slung over their shoulder, and, being armed with pikes, are to be drawn up as the rear rank of the infantry and artillery corps, thus forming nearly a third part of the volunteer militia*.

ART. 9. That the pioneers or pikemen, not being so easily collected, and their discipline consisting only of marching, charging, and recovering their pikes, which is easily acquired, shall assemble only once

* The volunteer corps of infantry are drawn up two deep; and it may be affirmed that no troops, however well disciplined, can use fire arms with safety and effect in a third rank, which therefore comes to be more properly armed with pikes; and even a fourth rank, of that description, might be added with great advantage. The pikes, being twelve feet long, would protect and give confidence to the two first ranks in firing and loading their muskets; and the men, with fire arms in the front, would give confidence to the pikemen in the rear. General Lloyd strongly recommends the addition of pikemen in our infantry establishments.

a-week, for six hours, every Saturday, during the two months already mentioned, for which they shall receive one shilling of pay, and shall be entitled to clothing, once in three years, the same as the rest of the volunteer militia.

ART. 10. That, in order to defray the expence of the volunteer establishment, a sum of money shall be granted by Parliament, for pay, clothing, &c., equal to what is granted for the like number of the regular militia in time of peace ; the money to be at the disposal of a committee of the Lord Lieutenant, field officers, and captains of the corps.

ART. 11. That the residue of this sum, which would be considerable, shall form a fund for the relief of the aged and infirm who have served in the volunteer militia,

and their families when reduced by sickness or misfortune *.

ART. 12. That no person shall be entitled to relief from this fund who has not served three years in the volunteer militia; the sum to which he or his family shall be entitled, to be proportioned to his time of service.

ART. 13. That men who have served 15 years in the volunteer militia, shall, on attaining the age of *sixty*, be entitled to pensions from the fund, not exceeding 10*l.*; and in case the fund shall not be sufficient to afford pensions to all persons who need

* This would operate in the same manner as a society fund for the benefit of the inferior class of persons belonging to the volunteer militia; and, being placed at the disposal of their commanders, would not only be the means of affording a just relief to deserving men in distress, but would be a certain guarantee for their regular attendance and good conduct.

to avail themselves of it, then the pensions shall be restricted to the most aged on the list.

ART. 14. That this fund being considered as a gratuity from the nation, which may become a general benefit and encouragement to all engaged in the defence of the country ; with this view, all men who have served with credit in the navy, in the standing army, in the regular militia, or in fencible regiments, shall, upon being admitted into the volunteer militia, be entitled to relief from the fund according to the length of their former service ; but it is to be understood that such men will be required to produce a certificate of their good conduct from their commanders before they can be admitted into the volunteer militia, and must afterwards serve five years in it before they can be entitled to the pension.

ART. 15. That the arms and accoutrements of the volunteer militia, the cavalry excepted, shall, after the two months exercise, be returned into the public arsenals, where they shall be numbered and arranged in such a manner as to be ready for delivery on the shortest warning *.

ART. 16. That clothing shall be issued to the embodied militia once in three years, or an allowance of 3l. in lieu of it, to such persons as shall have furnished themselves with clothing of the same pattern, but of a superior quality; and in order that the clothing furnished by government may be preserved in good order, it is not to be worn unless during the two months allotted for discipline, and upon Sundays. The clothing shall consist of a round black hat

* It is proposed that the cavalry shall retain their arms, in order that a certain part of the militia may be always in perfect readiness for service.

with a cockade and bearskin, a black stock, a scarlet jacket with blue cape and cuffs, a white waistcoat and blue pantaloons. This form of clothing will be suitable both to cavalry and infantry, only that close jackets will be preferable for the cavalry, and helmets instead of hats. The artillery shall have blue jackets made like those of the infantry, with cuffs and collars of scarlet. The clothing of the officers to be in the same form; and they may have long coats with epaulettes for full dress, but not to be used at parades or under arms*.

ART. 17. That when any person belonging to the militia shall, by change of residence, or by entering into the sea or land service, or by being ballotted into the

* The 2d regiment of Royal Edinburgh Volunteers have the dress here described, which has an excellent appearance, is simple, and useful.

regular militia *, quit the volunteer militia, he shall return his arms, accoutrements, and ammunition to the Captain of his troop or company, under the penalty of 10l.; also his clothing, in case he has not served one year in the militia; and any person enlisting or engaging persons belonging to the militia, who have not complied with this regulation, shall be liable in payment of the penalty.

ART. 18. That the discipline of the volunteer militia shall consist of what is most simple and essential in military exercises, extracted from the regulations for the discipline of the army, or according to a plan which may be ordered by his Majesty.

* It is not proposed that the volunteer militia should be exempted from the ballot for the regular militia, because it would create an envious distinction between the two establishments, and the services of men would not be very desirable in the volunteer corps, who might come into them merely to avoid the ballot for the regular militia.

ART. 19. That, as an encouragement to the militia to excel in their discipline, a sum of money shall be allowed each year from the fund mentioned in the 11th article, for the purchase of premiums to be distributed at the general review, to those most expert in their exercise, or who fire best at a mark, and to the horsemen most expert in the management of their horses and arms.

ART. 20. That regular attendance during the two months exercise, shall be enforced by the forfeiture of pay and by fines; but remissness in attendance when warned for service, being a delinquency of the greatest magnitude, must be brought under the cognizance of a court martial, which shall, on all occasions, be composed of officers of the volunteer militia.

ART. 21. That the fund arising from

finer for non-attendance and other delinquencies, shall be laid out in an entertainment for the militia upon the days of their general reviews, or in such other manner as shall appear for the general benefit of the corps.

ART. 22. That during war, in case of actual invasion, or appearance of invasion, the volunteer militia may be ordered to assemble by the commander in chief, or the general commanding the district, by application to the Lord Lieutenant, or to his deputies in their respective districts; and in cases of tumult, or internal commotions, which may affect the peace of the county, any part of the militia may either, during war or peace, be ordered to assemble, and to aid in quelling it by requisition of the sheriff, or any three justices of the peace in writing, addressed to the commanding offi-

cer of the militia in the county or neighbourhood.

ART. 23. That the volunteer militia, whenever employed upon service, shall receive exactly the same pay and allowances as the regular army, with this difference in the cavalry, that the non-commissioned officers and privates shall be allowed 1s. 6d. a-day in addition to their pay, for the maintenance of their horses.

ART. 24. That the volunteer militia, when assembled at a distance from their homes, for the purpose of being reviewed, or when called out upon service, shall be billeted by the magistrates of the place, or justices of the peace in the neighbourhood, upon all such houses as are capable to receive them.

ART. 25. That the volunteer militia shall

be entitled to the same privileges as the regular militia ; and in case of men being disabled by wounds, they shall be entitled to the Chelsea pension for life.

ART. 26. That in each county, or for every corps of 1000 men in any county, constant pay shall be allowed to an adjutant, a riding master, and to a conductor of stores, who shall have charge of the great guns and ammunition, and to an armourer for keeping the arms in repair, and to a drill serjeant and drummer for each company of infantry or artillery ; but no person shall be employed as an adjutant, a riding master, a conductor, a drill serjeant or a drummer, who has not actually served in the army for *five* years ; and, in order to prevent the admission of improper persons into these situations, they shall be appointed by the board of officers in each county, mentioned in the 10th article of these regulations,

REMARKS.

THE preceding plan will no doubt be found deficient in many particulars; but if the outline be approved, the lesser parts may be easily supplied,

IN Scotland, where, in consequence of not having a militia, volunteer corps have been embodied in all the principal towns the number of men now armed and disciplined, exceeds 12,000, without being attended with material inconveniency to the persons composing them. Were the plan extended to the country, in the manner proposed, there can be little doubt that one half more might be inrolled as artificers and pioneers, to be armed with pikes, which would make this establishment in Scotland amount to 18,000.

Supposing the population of England four times, and of Ireland double that of Scotland, it may be estimated that the following numbers might form the general volunteer militia of the united kingdoms.

Kingdoms.	Cavalry, Infantry and Artillery.	Artificers, or Pioneers, arm- ed with pikes.	Total.
England,	48000	24000	72000
Ireland,	24000	12000	36000
Scotland,	12000	6000	18000
	<hr/> 84000	<hr/> 42000	<hr/> 126000

THE expence of this establishment in time of peace, as only one month's pay in the year would be granted for the volunteer corps, would amount to about the same sum as constant pay for 10,000 regular troops, which is a twelfth part of the above number of volunteer militia ; or, what may give a still more correct idea of the expence, it

would be exactly the same as for the like number of the regular militia on the peace establishment, who receive one month's pay in the year, with constant pay for an adjutant to each regiment, a serjeant and a drummer to each company, as proposed in the volunteer militia. This expence may be easily ascertained, and it will probably be found to be the cheapest, as well as the best addition which could be made to our peace establishment.

If the expence, however, be thought too great, the numbers may be reduced at pleasure, leaving only a sufficient volunteer force to maintain the internal peace of the country, and to serve as a foundation upon which a greater may be raised, in case of any emergency requiring an increase to this establishment.

A GENERAL militia, formed upon this

or some other plan, more adequate to the important object of its institution, would be attended with the following advantages.

I. A RESPECTABLE force would be thereby established, composed of persons of property, and resident inhabitants of the country, formed into an army of militia, consisting of proportional parts of cavalry, artillery, and infantry; ready, when duly required, to assemble at all times for repelling foreign invasion, or quelling internal commotion.

II. A GENERAL militia, without interrupting the necessary avocations of society, would bring together and unite the several classes of the people in a military system for the defence of their king and country, under regulations which would excite the lower orders to loyalty and good conduct; and who, in consequence of their faithful

services to the public, being assured of support to themselves and their families, would look up with confidence to their superiors, whose duty and pleasure it would be to afford them protection, and reward their merits.

III. A system of general militia would maintain a spirit of military ardour in these kingdoms. Men, trained to the use of arms at home, would engage more readily in the service of their country abroad: and the army would, in some measure, be recruited with disciplined soldiers, who would regard the militia, where they commenced their career, as an establishment which might afford them future employment, and an honourable retreat in their native country.

Finally, With such a system, and such a force, we should feel the dignified confi-

dence which Britons ought to have in their own strength and resources ; our inveterate enemies could no longer alarm us with threats of invasion, to the prejudice of our character, our commerce, and our public credit ; and, whatever misfortunes might befall our fleets and armies abroad, we should be effectually guarded against the attacks of the enemy at home, and be prepared to meet him with decided superiority on our own coast.

CHAPTER IX.

Suggestions for the Improvement of the Standing Army ; and for connecting it with the Navy and with the Militia.

WERE the limits of the British empire confined to our native islands, a standing army might be justly considered both as an unconstitutional and useless establishment ; because our home defence might be amply provided for, as in Switzerland, by a general militia. But our native country is, in fact, only the *head* of a great commercial empire, whose prosperity depends upon the maintenance of her power in distant colonies and conquered countries, chiefly in the East and in the West Indies, whence

she draws the main sources of her wealth *. A regular standing army for the defence of those possessions, in proportion to their extent, is therefore absolutely necessary, as a part of the establishment, for securing the prosperity of the nation; and the danger arising to our liberties, from the maintenance of such an army, will be greatly lessened, or entirely vanish, if, in addition to the safeguards afforded by the constitution †, it shall be determined that our main force, for home defence, shall be at all times a general militia ‡.

* A prince in the East Indies being shown upon a map what a small spot the island of Great Britain is, said, It resembles a hive, and that the people were as industrious as bees, in collecting and carrying to it the sweets of the whole world.

† The Bill of Rights stipulates, that the pay for the army shall be voted, and the mutiny act renewed from year to year by Parliament.

‡ The general militia, according to the plan proposed (see page 115.), would amount in Great Britain and Ireland to 126,000. The regular army, in time of peace, has never exceeded 40,000, above one half of which is always employed upon foreign service.

THE regular army, it is conceived, ought to be founded in some measure upon the militia, and to arise from thence as a highly finished superstructure does from a broad and solid basis.

UPON this principle, and with a view to render the army an establishment, not only of more general utility to the public, but also more congenial to the principles of a free government, in which the happiness of every class and description of the people ought to be regarded, several suggestions may be stated for its improvement.

1st, THE age of sixteen being fixed as the earliest time for the admission of officers into the army, it might be stipulated, that they must produce a certificate of having passed review as cadets in the militia *;

* This would in some measure qualify gentlemen to act as officers on joining their regiments, and would produce an early

and, on the other hand, no person should be eligible to the appointment of adjutant in the militia who has not served at least five years in the army.

2d, THAT the soldiers should be enlisted for *five* years, or during any war which may happen in that time, they being entitled to a farther bounty (perhaps One Guinea at home and Two abroad), for every year of service beyond the five, for which they were enlisted *.

3d, THAT soldiers, who have served in

attachment to the militia, where they might be said to have commenced their service.

* The soldiers for the East India Company are enlisted for *five* years. Some few come home after that period, but in general they reenlist for five years more, for which they receive a bounty of 10l., and continue to serve voluntarily from period to period, while they are fit for active service; and thereafter many of them return with a comfortable competency to their native country. The Swiss soldiers are also enlisted for a short period.

the army with credit for five years, should be eligible, if otherwise qualified, for drill serjeants in the militia; and no other persons be enlisted to hold these appointments.

4th, WHEN a foldier embarks for foreign service, a third part of his pay, which he may then spare, should be paid, if he desire it, regularly to his family or relations during his absence; and, in case he shall die upon foreign service, means should be taken to give intimation of it to his family *.

5th, THAT every foldier discharged abroad, in consequence of being disabled

* It ought to be part of the duty of the surgeon of the regiment to acquaint the soldiers relations of the time and circumstances of their death. The surgeon should therefore be furnished with a list of the men's names, and with the addresses of their nearest relations, to whom he is to write in case of their death.

by sickness, and who has served with credit, even for ever so short a period, should be entitled to half of the Chelsea pension for life, or to the whole, if his case shall appear to entitle him to it *.

6th, THAT, upon soldiers being ordered abroad, their children should be received into asylums provided for that purpose, in which they should be maintained and educated until they be of an age fit for going to service or trades †.

* At present there are a great many deserving men discharged, from being disabled upon foreign service, who become beggars, and are reduced to the most deplorable want.

† At Madras in the East Indies, an asylum for the female orphan children of soldiers was established by subscription in the year 1788, under the patronage of the Lady of Sir Archibald Campbell; an institution of great utility, which reflects the highest honour upon her Ladyship. A male orphan asylum was afterwards instituted upon nearly the same plan; and into both of these asylums the soldiers children were received on the breaking out of the war with Tippoo Sultan in 1790. The male asylum was, from the time of its institution till last year, under

7th, THAT the soldiers should be employed, as frequently as circumstances will admit, upon public works, such as repairing fortifications, making roads, building bridges, cutting canals, forming harbours, &c. Officers and non-commissioned officers should be sent with the working parties, who, as well as the men, ought to receive double pay. In harvest time, a pro-

the charge of the Rev. Dr. Bell, who declined receiving either salary or emolument for his trouble. It has succeeded beyond the most sanguine expectations, and has afforded an opportunity for a learned and ingenious man to introduce a new mode of teaching and regulation, which he has lately communicated to the public, and which will be probably found to suggest some great improvements in the discipline of schools.

These asylums are supported partly by an allowance from the Madras government, but chiefly from the interest of the original sums subscribed. The funds of the male asylum, which were the lowest, were increased 4000l. by the balance of undivided and unclaimed prize money, after the late war with Tippoo-Sultan.

Perhaps a fund for such institutions in Great Britain might be found in the difference between the sums voted by Parliament for the maintenance of the standing army, and the actual expenditure, according to the number of effective men, which is always considerably below the establishment.

portion of the soldiers, as many as can be spared from their military duties, should be allowed to assist as reapers in the neighbourhood*.

THESE articles comprise the measures which appear to be the most essential for connecting the regular army with the militia, for improving the condition of our soldiers, and for inducing men to enter freely into the military profession †.

* Let us hope that, on the return of peace, government will undertake some great public works for the general improvement of the country. The expence would be repaid tenfold, partly by the revenue or tolls raised on such lines of communication, but chiefly by the increasing prosperity of the country. For instance, a navigable canal between Newcastle and the Solway Frith would be a great national improvement, in which the three united kingdoms are all interested, and which in all probability will never be completely executed without the aid of government.

† It is much to be regretted, that the military character, which ought to be honourable in every degree, has been too much degraded by the admission of vagabonds, and even criminals from the jails, which has the farther bad effect of introducing vice and mutiny among the troops.

IN a general militia, there must be no obstacle to prevent men inlisting from it into the regular service; and, by encouraging their return to the militia, not only as serjeants, but also as privates *, both services would be benefited, and become united as parts of the same system of defence.

WITH respect to the expence attending the establishments recommended for the improvement of the regular army, it is probable they would be found small, compared with the enormous expenditure incurred in new levies, a great part of which would be saved in a future war; besides that, upon the present plan of the army, it soon becomes impossible to raise men upon almost any terms. In short, let men be encouraged to come forward in the defence of their country, by rendering the life of

† See Article 14th in the plan for a general militia.

the foldier comfortable, as well as honourable; let him be at all times the useful fervant of the public, and have the happiness to feel, that, instead of being ever considered as a burden to his country, he promotes its prosperity by his labours in peace, and defends it by his valour in war!

IN regard to the officers of the British army, it is universally allowed that they are eminently distinguished by their personal bravery and exertions; but we are supposed, not without reason, to be deficient in military science. This might be remedied, if the commission of second lieutenant, cornet, or ensign, was *not* to be purchased, and if the young men, who are candidates for commissions, were obliged to undergo a previous examination, both as to their general education, and their knowledge in the elements of tactics, gunnery, and fortification. The money which

is allotted for the purchase of the first commission might then, without hardship, be employed for the education of the youth; and we might expect to see our army filled with accomplished officers*.

It is by no means intended to condemn the practice of the sale of commissions in the army, which, *under proper regulation*, is of infinite use. It occasions a quick and more general promotion than could otherwise take place; enables those to retire who are either wearied of, or worn out in, the service, and keeps our army filled with active and zealous officers. If, to these advantages, we could add a greater degree of science, every object would be attained. Perhaps the sale of the first

* It is singular that there is no professor in any of our seminaries of learning, for instructing youth in the theory of the art of war; a defect which would become more evident, if military science were required of our officers.

commission might be prevented by adding the price to that of the troop or company, or by some other arrangement which might secure the present regulated price to officers who fell out in the rank of lieutenant-colonel, major, or captain, whose services justly entitle them to reward. An officer falling out in the rank of lieutenant, who has not purchased his first commission, can have no claim to the price of the ensigncy, unless from length of service, which seldom happens in the rank of lieutenant, and in that case he may be otherwise rewarded; and to the few who may fall out in that rank, who had purchased their first commissions, it would be no great expence, were government to make up the difference for a few years, until the new system has been completely carried into effect.

It is probably from the general want of

science in the officers of our army, that the corps of engineers has been instituted as a separate establishment. Their education is well calculated to render them men of science in fortification and gunnery; but as they cannot be equally skilled in tactics, and in the attack and defence of countries by the combined movements of troops, it thence arises, that military operations often become subservient to plans of fortification, leading us to defend forts and batteries, wherever engineers are of opinion that they may be erected with advantage; whereas fortification ought to be rendered subservient to the operations of the army, and to form only an inferior part in a system of general defence for the country. Hence it appears, that if the scientific education of military men were properly attended to, the engineers ought to be taken from the officers of the line and the artillery, and considered as part of the

staff;—an arrangement which would excite a laudable emulation in officers, and would give a wide field for the choice of men, skilled in every branch of the art of war, to be employed in that department.

SOME farther observations occur, which we shall beg leave to state, respecting the training of soldiers to endure fatigue, and the means of preserving their health in tropical climates. Upon the subject of discipline it is fortunately unnecessary to enter, as a new system has lately been introduced into our army, founded upon just principles, and which, under our present commander in chief, it may be hoped, will approach nearly to perfection *.

* See the regulations for the discipline of the army, founded upon the system introduced by Lieutenant General David Dundas, Quartermaster General of his Majesty's forces.

THE training of the foldier to endure fatigue, which was an effential part of the military difcipline of the ancients, feems to have been almoft entirely neglected by modern nations. Among the Spartans the feverity of difcipline was fuch, in order to prepare for war, that it appeared to them a relaxation to take the field againft an enemy; and it was feldom that either the Greeks or the Romans fuffered from ficknefs: whereas, in modern times, the fatigue of a campaign is far more fatal to an army than the weapons of an enemy; and our troops are entirely unprepared, by exercife, to refift difeafe upon a change of climate.

VEGETIUS, in his account of the Roman difcipline, fays, “ Our mafters in the art of
 “ war were of opinion, that daily exercife
 “ in arms contributed more to the health
 “ of the troops than the fkill of the phyfi-

“ cian ; from which we may judge what
 “ care should be taken to habituate sol-
 “ diers to the exercise of arms, to which
 “ they owe both their health in the camp
 “ and their victory in the field *.”

IN whatever climate troops may be stationed, and whether in camp or in cantonments, they ought not only to be exercised for several hours, but also accustomed to march frequently a certain number of miles, with their knapsacks; and, if in camp, with their haversacks and canteens also filled, and they ought to perform their marches in a given time †. If circumstances admit, they ought to be accustomed to throw up field works, to carry on approach-

* This extract, and some excellent thoughts on the army, will be found in Kames's Sketches of the History of Man.

† The Roman soldiers were accustomed to march twenty, or even twenty four miles in five hours, and upon these marches carried sixty pounds weight.

es against a place where a supposed fortress may be lined out; to fight sham battles; and in short to practise, as far as possible, whatever takes place upon actual service.

TROOPS, when at sea, should be obliged to keep watch with the sailors, to clean their part of the ship regularly every day; to bathe, and to shift their linen often. They should be exercised for several hours daily, whenever the weather will permit, and amusements should be encouraged which may excite them to exertion.

SEA voyages, and service on board ship, are of such great importance in training soldiers to endure hardship, and to face danger, that it is greatly to be lamented that our army and marines are not one establishment. Were that the case, a part of the army would be constantly employed by rotation on board the fleet, and it would become,

as General Lloyd justly says our army ought to be, *amphibious*; a great advantage, whence another would arise, that our army would become a nursery for our navy, as many of the soldiers, who had served in the fleet, would, after the first period of their service in the army, enter into the navy. The officers and men of both services would also become better acquainted, animosities would be prevented, and it would not be so rare to see the navy and army act cordially together upon service. The troops, when on board ships of war, serving as marines, ought to be strictly subject to the discipline of the navy; and that principle, which is indispensable, being clearly established, there would be no room nor cause for disputes.

In regard to the prevention of sickness in tropical climates, it is evident, from the healthy state of men on board ships of

war, which are under proper discipline, that the pestilence in these latitudes is not in the atmosphere. Although an epidemic disease may rage occasionally, the constant unhealthiness of any country must arise from local circumstances, such as an interruption of a free circulation of air by high hills or by woods, putrid exhalations arising from marshes and uncultivated lands, bad water, &c.

IN the island of Jamaica in the West Indies, where the troops are generally unhealthy in the garrisons along the coast, and were particularly so in the years 1780 and 1781, a calamity doubly alarming, as the island was threatened with an attack by the combined forces of France and Spain, the late eminent Sir Archibald Campbell determined to try a new experiment for the accommodation of the troops. He chose an elevated situation in the moun-

tains behind Kingston, called Stoney Hill, where there was good water, a free circulation of air, and a temperature of climate in general ten degrees cooler than in the low country along the coast. The wood, which was cleared from the hill, and the soil, which was clay, were the chief materials used in constructing the barracks. The 19th and 30th regiments were sent there on their arrival from America, and ground was allotted to them for gardens. They enjoyed a degree of robust health very unusual in that climate. When not upon duty, or under arms, they were employed in their gardens, or in amusements, the whole day long. Their wives and children enjoyed equal happiness; and in the course of two years, this military colony, for so it appeared, had not at any time a greater, if even so great, a proportion of men sick, as they would have had in Europe; and there is reason to believe, that, during that time,

they had nearly as many children born in the regiment as they had lost men by death *.

THIS fact will appear highly interesting to all military men, and is well deserving the attention of Government. It may also be worthy of consideration, whether our West India islands might not be more effectually defended by fortified cantonments, in such commanding situations, whence the troops would march in health to meet the enemy on the coast, than by weak batteries and forts, which cannot be long defended against a superior force, and, when taken, give a footing to the enemy, which prevents their being afterwards relieved, and frustrates the advantage arising from a superior fleet. It was upon the natural strength of the country, and not upon the fortifications along the coast, that

* The author was at that time Adjutant General in Jamaica.

Sir Archibald Campbell, a most skilful engineer, placed his chief reliance for the defence of Jamaica.

IN the East Indies, the country being more open and better ventilated, and the soil, in general, of a light dry nature, the climate, although the heat be greater, is far more healthy than in the West Indies : And it has there been found, that troops, after being gradually seasoned, may use violent exercise, and expose themselves freely in the sun : at least, such is the case on the coast of Coromandel ; and, excepting in the lower parts of Bengal, where circumstances are different, may be said to be the general character of the climate in India.

THE benefit of using violent exercise in a hot climate, where the air is pure, was proved in an extraordinary degree by the 36th and 52d regiments when quartered at Poonamalie near Madras in the years

1788 and 1789. After being under arms for two or three hours in the morning, it was their custom to dedicate several hours in the forenoon, under the burning heat of the sun, to exercise. The officers played at *fives* in an open court built for the purpose, or in parties at *cricket* on the parade, without coat, waistcoat, or shoes. The soldiers favourite amusement was *long bullets* *: Their only covering was a pair of drawers, neither shirt, hat, shoes, nor stockings: And, after these active exercises, both officers and soldiers plunged into the river, as the Romans did into the Tiber, to cleanse their bodies of the dust. These two regiments, at their reviews, had but a very few men sick, and deaths were as rare in them as in Europe. The other regiments on the coast of Coromandel followed the same plan of exercise, though not to the like extent;

* This amusement consists in throwing a lead or iron bullet of several pounds weight along the ground, and whoever throws his farthest counts one, till they reach twelve or the number settled for game.

but all of them were well prepared for service, and so it proved. In the year 1790, the army took the field against Tippoo Sultan. The troops were always most healthy when most active, and enduring the greatest fatigues; and the whole of the European regiments continued for *three* complete years in the field, and were not, after all their marching and fighting, greatly reduced in numbers, even at the end of the war.

IN all military arrangements, the discipline of the soldier, and the inuring him to fatigue, ought to be connected as far as possible with useful labour or defence. In the East Indies, a great part of the European force, it is conceived, ought to be constantly in the field, not in a fixed camp, which, in a hot climate, soon becomes noxious and unhealthy, but moving constantly from place to place, in which there is no difficulty in so open a country; and,

if they kept the field, even during the monsoon or rainy season, it would be probably found that they would be less unhealthy than in cantonments*. The British empire in the east is sustained by our military prowess; and our having a considerable force constantly in the field in India, would not only maintain a most useful system of discipline in the army, but would also support our authority in the most effectual manner with the native powers, and be probably the means of preventing expensive and doubtful wars.

* The *hammock tent* is a great improvement in camp equipage, and would be particularly useful in tropical climates, where it is still more unwholesome to lie upon the damp ground than in Europe. The hammock might also be used when the troops are in barracks, hung upon hooks, one end to the wall, the other to upright posts at a proper distance from it; and would not only be a more comfortable bed than a platform, but would give more room and allow the barracks to be more easily cleaned and better aired. The saving of straw for the tents in the field, and of platforms or other beds in barracks, would do more than compensate the expence.

CONCLUSION.

THIS treatise having been written upon the pressure of the occasion, without much leisure or previous reflection, it is hoped, that, as an humble attempt to communicate information on a subject more than ever interesting to the public, it will be judged of with indulgence.

THE plans for the defence of Great Britain and Ireland, contained in the first part of this work, have been detailed rather as a record of what has been done, than with a view to suggest what should be done at this period of the war, and may be useful to recur to upon some future exigency of the state.

THE plan for a general militia, and the other suggestions which are, with great diffidence, brought forward in the three last chapters, as tending to improve the system of permanent defence for the country, will be probably deemed inadequate to so great a purpose. Such ideas may, however, aid in forming more efficient plans, which it is ardently hoped may be undertaken with the same views;—to render these hitherto happy united kingdoms impregnable to both internal and external enemies; to promote every where the security of the British empire; and, under the favour of Divine Providence, to maintain that pre-eminence among nations, by which we have been so long distinguished, as a warlike, a virtuous, and an industrious people.

